

# MMWR

**MORBIDITY AND MORTALITY WEEKLY REPORT**

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## *Epidemiologic Notes and Reports*

### **Worker Fatalities due to Excavation Cave-Ins**

Worker fatalities due to excavation cave-ins in four states have recently been investigated by the National Institute for Occupational Safety and Health (NIOSH) as part of its Fatal Accident Circumstances and Epidemiology (FACE) project. Brief reports follow.

On February 25, 1985, a 22-year-old laborer in Georgia was manually digging a dry well and an 8-foot-deep trench for a drainage-pipe connection. One wall of the trench collapsed, covering him with 6 feet of soil. He was apparently dead at the scene. None of the walls in the excavated area were shored (braced) or sloped appropriately.

On March 24, 1985, a 45-year-old "lead man" on a construction crew in Arizona was shoveling loose dirt from the bottom of a 21-foot excavation. He was preparing it for the placement of a fabricated trench shield. As soil began falling from a side wall, the worker tried to leave the site, but the soil gave way, covering him. He died during surgery approximately 6 hours after the cave-in. The vertical walls of this excavation had not been shored.

On May 3, 1985, a 33-year-old field foreman on a construction site in Pennsylvania was standing in a vertical-walled excavation approximately 7 feet deep. One wall caved in, knocking him to the ground and burying him. Efforts to revive him at the scene were unsuccessful. The walls of the excavation had not been shored.

On August 8, 1985, a two-man crew in Ohio was using a backhoe\* in an 11- to 12-foot-deep excavation to cut a lateral trench off an 8-inch sewer main. One of the crew, a 62-year-old laborer, was killed when the trench wall collapsed, covering him with 3 feet of soil. The sides of the trench had not been shored.

NIOSH investigators determined that neither the relevant Occupational Safety and Health Administration (OSHA) standards nor the NIOSH-recommended work practices for such excavations had been adhered to in any of these cases. The current OSHA standards† specify that:

1. The walls and faces of all excavations in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the ground, or some other equivalent means.
2. Sides of trenches in unstable or soft material 5 feet or more in depth shall be shored, sheeted, braced, sloped, or otherwise supported by means of sufficient strength to protect employees working within them.
3. Excavations (including trenches) adjacent to backfilled areas or subjected to vibrations from railroads, highway traffic, or operation of machinery shall have additional shoring and bracing precautions taken.

\*An excavation machine with a mechanical arm that operates back toward the worker.

†29 CFR 1926.651 and 1926.652.

### Excavation Cave-Ins — Continued

NIOSH and the National Bureau of Standards (NBS) recommend that:

1. Shoring systems or sloping of the walls be used in all excavations 5-24 feet deep in any type of soil, except solid, stable rock.
2. Appropriate shoring, shielding, or sloping requirements for all excavations deeper than 24 feet (except those in unfractured rock) be determined by an engineer qualified to make these determinations.
3. All employers engaged in excavation activities familiarize themselves with the provisions of the NBS/NIOSH document, *Development of Draft Construction Safety Standards for Excavations* (1) and implement them as safe work practices in conjunction with compliance to the existing OSHA standards.

The investigations further determined that compliance with the relevant OSHA standards or adherence to the NIOSH-recommended work practices regarding excavations would have reduced the inherent risk in each of the four reported fatal incidents.

*Reported by Injury Surveillance Br, Div of Safety Research, National Institute for Occupational Safety and Health, CDC.*

**Editorial Note:** Excavation cave-ins often cause serious and fatal injuries to U.S. workers. Analysis of workers' compensation claims for 1976-1981 (2) in the Supplementary Data System of the Bureau of Labor Statistics suggests that excavation cave-ins caused approximately 1,000 work-related injuries per year. Of these, approximately 140 resulted in permanent disability, and 75 were fatal. Thus, this type of incident is an important cause of occupational deaths, and accounts for nearly 1% of all work-related deaths reported annually in the United States.

To clarify prior OSHA regulations, NBS and NIOSH have developed recommendations establishing a requirement to provide protection in excavations 5 feet deep or greater, regardless of soil type. These recommendations also present a simplified soil-classification system for use in determining appropriate side-sloping requirements and for calculating the lateral soil pressures imposed on shoring systems.

The principal objective of investigations undertaken by NIOSH as part of its FACE project is to determine what factors allowed the fatality to occur and how such fatalities can be prevented. Whether an operation was in compliance with existing mandatory standards is only one of many variables that may have contributed to the fatality. Evidence of noncompliance in the four incidents described above suggests that employers are either (1) unaware of the existence of the OSHA standards or (2) misinterpreting the requirements of the standards. As an obvious first step in preventing such fatalities, all such operations should be done in full compliance with existing OSHA standards.

NIOSH urges safety and trade associations, underground-utility companies, and municipalities and other local governments responsible for underground-utility services, as well as state OSHA consultative services to bring these recommendations to the attention of employers engaged in excavations.

Suggestions, requests for additional information on safe work practices, or questions related to this announcement should be directed to Director, Division of Safety Research, National Institute for Occupational Safety and Health, 944 Chestnut Ridge Road, Morgantown, West Virginia 26505; telephone (304) 291-4595.

#### References

1. National Institute for Occupational Safety and Health/National Bureau of Standards. Development of draft construction safety standards for excavations, Vols. I and II. NBSIR 83-2693, DHHS (NIOSH) publication no. 83-103.
2. U.S. Department of Labor, Bureau of Labor Statistics. Supplementary data system. Unpublished injury and fatality data for 1976-1981.

*International Notes***Dengue — the Americas, 1984**

In 1984, dengue activity in the Americas remained at a relatively low level, with 43,435 cases reported from 20 countries (Table 1). Three dengue serotypes (DEN-1, DEN-2, and DEN-4) circulated in the region (Figure 1).

Mexico had the greatest activity, with 27,312 cases reported, and experienced its first cases of severe hemorrhagic disease with dengue-associated fatalities in 1984. Three serotypes were involved, DEN-1 and DEN-2 on the west coast and DEN-1 and DEN-4 in Yucatán. Dengue hemorrhagic fever (DHF) occurred in Puerto Vallarta, Jalisco, and in Merida, Yucatán. The outbreak in Yucatán included 5,390 reported cases and was caused by DEN-4. Nine patients had hemorrhagic disease, and four died. DEN-4 was isolated from one patient who died and from two of the other patients with hemorrhagic fever. Five others were confirmed by IgM-capture enzyme-linked immunosorbent assay and/or hemagglutination-inhibition and complement fixation tests, and one could not be confirmed.

In Central America, Belize, El Salvador, and Honduras each reported dengue activity. DEN-1 virus was isolated from cases during a small outbreak in Belize. In Honduras, both DEN-1 and DEN-2 virus transmission were confirmed, but disease occurrence was only sporadic.

**TABLE 1. Reported dengue cases, by country — the Americas, 1984**

| Location              | Date of last reported case | Total reported cases | Virus serotype        |
|-----------------------|----------------------------|----------------------|-----------------------|
| Aruba                 | December                   | 12,000*              | DEN-1                 |
| Barbados              | December                   | 63                   |                       |
| Belize                | December                   | 137                  | DEN-1                 |
| Colombia              | December                   | Unknown              | DEN-1, 4              |
| Dominican Republic    | June                       | 260                  | DEN-1, 4              |
| El Salvador           | September                  | 560                  |                       |
| Guyana                | December                   | Sporadic             |                       |
| Grenada               | December                   | 3                    |                       |
| Guadeloupe            | December                   | 339                  |                       |
| Haiti                 | September                  | 328                  | DEN-1, 2              |
| Honduras              | December                   | 378                  | DEN-1, 2              |
| Jamaica               | December                   | 12                   |                       |
| Martinique            | December                   | Sporadic             |                       |
| Mexico                | December                   | 27,312               | DEN-1, 2, 4           |
| Puerto Rico           | December                   | 1,872                | DEN-1, 2              |
| St. Christopher-Nevis | December                   | 1                    |                       |
| Trinidad & Tobago     | December                   | 31                   | DEN-1, 2, 4           |
| United States         | December                   | 67†                  | DEN-1, 3              |
| U.S. Virgin Islands   | December                   | 72                   | DEN-1                 |
| Venezuela             | December                   | Unknown              | DEN-1, 2              |
| <b>Total</b>          |                            | <b>43,435</b>        | <b>DEN-1, 2, 3, 4</b> |

\*Estimated.

†Imported cases only.

## Dengue - Continued

In most of the Caribbean islands, the extent of dengue virus transmission was limited in 1984. DEN-1 and DEN-4 transmission was confirmed in the Dominican Republic, while Haiti had confirmed cases of both DEN-1 and DEN-2. Puerto Rico reported 1,872 clinical cases, but only six were confirmed. In Puerto Rico, DEN-1 and DEN-2 viruses were isolated for the first time since 1982 and 1978, respectively. Three cases of DEN-1 were confirmed in the U.S. Virgin Islands. A large outbreak of DEN-1 occurred in Aruba, the Netherlands Antilles, beginning in December 1984. Two fatal cases of hemorrhagic disease were reported, one of which was confirmed as DEN-1 by virus isolation. Low-level DEN-1, DEN-2, and DEN-4 transmission was confirmed in Trinidad. Other Caribbean islands reported sporadic transmission, but the virus serotypes are not known.

In South America, Colombia confirmed cases of DEN-1 and DEN-4, and Venezuela confirmed cases of DEN-1 and DEN-2. Neither country reported major epidemic activity in 1984.

(Continued on page 57)

TABLE I. Summary—cases specified notifiable diseases, United States

| Disease  | 4th Week Ending |               |                  | Cumulative, 4th Week Ending |               |                  |
|--|-----------------|---------------|------------------|-----------------------------|---------------|------------------|
|  | Jan. 25, 1986   | Jan. 26, 1985 | Median 1981-1985 | Jan. 25, 1986               | Jan. 26, 1985 | Median 1981-1985 |
| Acquired Immunodeficiency Syndrome (AIDS)        | 201             | 80            | N                | 859                         | 357           | N                |
| Aseptic meningitis                               | 95              | 69            | 92               | 299                         | 275           | 337              |
| Encephalitis: Primary (arthropod-borne & unspc.) | 15              | 13            | 15               | 53                          | 49            | 59               |
| Post-infectious                                  | 3               | 3             | 1                | 3                           | 9             | 7                |
| Gonorrhea: Civilian                              | 18,525          | 18,396        | 17,703           | 60,384                      | 57,792        | 73,530           |
| Military   | 339             | 211           | 404              | 985                         | 1,070         | 1,990            |
| Hepatitis: Type A                                | 488             | 370           | 424              | 1,536                       | 1,298         | 1,420            |
| Type B   | 437             | 419           | 419              | 1,563                       | 1,461         | 1,461            |
| Non A, Non B                                     | 36              | 83            | N                | 182                         | 264           | N                |
| Unspecified                                      | 136             | 70            | 145              | 346                         | 274           | 520              |
| Legionellosis                                    | 9               | 30            | N                | 34                          | 56            | N                |
| Leprosy  | 11              | 1             | 2                | 27                          | 10            | 10               |
| Malaria  | 11              | 20            | 13               | 42                          | 40            | 46               |
| Measles: Total*                                  | 16              | 8             | 8                | 54                          | 33            | 34               |
| Indigenous                                       | 16              | 1             | N                | 51                          | 16            | N                |
| Imported   | -               | 7             | N                | 3                           | 17            | N                |
| Meningococcal infections: Total                  | 51              | 55            | 67               | 195                         | 168           | 222              |
| Civilian   | 51              | 55            | 67               | 195                         | 168           | 215              |
| Military   | -               | -             | -                | 1                           | -             | 1                |
| Mumps  | 30              | 55            | 92               | 120                         | 181           | 304              |
| Pertussis  | 19              | 34            | 20               | 100                         | 89            | 65               |
| Rubella (German measles)                         | 10              | 3             | 12               | 19                          | 17            | 51               |
| Syphilis (Primary & Secondary): Civilian         | 454             | 644           | 644              | 1,568                       | 1,708         | 2,270            |
| Military   | -               | 2             | 11               | 9                           | 12            | 32               |
| Toxic Shock syndrome                             | 2               | 6             | N                | 13                          | 24            | N                |
| Tuberculosis                                     | 428             | 387           | 387              | 1,048                       | 1,066         | 1,278            |
| Tularemia  | 2               | 2             | 1                | 6                           | 10            | 9                |
| Typhoid fever                                    | 12              | 1             | 6                | 19                          | 7             | 29               |
| Typhus fever, tick-borne (RMSF)                  | 2               | -             | 2                | 4                           | 1             | 3                |
| Rabies, animal                                   | 89              | 43            | 83               | 291                         | 238           | 320              |

TABLE II. Notifiable diseases of low frequency, United States

|                                    | Cum 1986 |  | Cum 1986 |
|------------------------------------|----------|--|----------|
| Anthrax                            | -        | Leptospirosis                              | 8        |
| Bioterrorism: Foodborne            | -        | Plague                                     | -        |
| Infant (N. Mex. 1)                 | 4        | Polio myelitis, Paralytic                  | -        |
| Other                              | -        | Psittacosis                                | 1        |
| Brucellosis (Calif. 1)             | 4        | Rabies, human                              | -        |
| Cholera                            | -        | Tetanus                                    | 2        |
| Congenital rubella syndrome        | 1        | Trichinosis (N.H. 2; Mass. 1)              | 7        |
| Congenital syphilis, ages < 1 year | -        | Typhus fever, flea-borne (endemic, murine) | -        |
| Diphtheria                         | -        |  |          |

\*There were no cases of internationally imported measles reported for this week.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 25, 1986 and January 26, 1985 (4th Week)

| Reporting Area   | AIDS<br>Cum.<br>1986 | Aseptic<br>Mening-<br>itis<br>1986 | Encephalitis |                      | Gonorrhea<br>(Civilian) |              | Hepatitis (Viral, by type) |     |        |                  | Legionel-<br>losis<br>1986 | Leprosy<br>Cum.<br>1986 |
|------------------|----------------------|------------------------------------|--------------|----------------------|-------------------------|--------------|----------------------------|-----|--------|------------------|----------------------------|-------------------------|
|                  |                      |                                    | Primary      | Post-in-<br>fectious | Cum.<br>1986            | Cum.<br>1985 | A                          | B   | NA, NB | Unspeci-<br>fied |                            |                         |
|                  |                      |                                    |              |                      |                         |              |                            |     |        |                  |                            |                         |
| UNITED STATES    | 859                  | 95                                 | 53           | 3                    | 60,384                  | 57,792       | 486                        | 437 | 36     | 136              | 9                          | 27                      |
| NEW ENGLAND      | 20                   | 2                                  | 2            | -                    | 1,288                   | 2,047        | 5                          | 29  | 2      | 6                | -                          | -                       |
| Maine            | 1                    | 1                                  | -            | -                    | 74                      | 86           | -                          | 5   | -      | -                | -                          | -                       |
| N.H.             | 1                    | -                                  | 1            | -                    | 29                      | 39           | 1                          | -   | -      | -                | -                          | -                       |
| Vt.              | 1                    | -                                  | -            | -                    | 18                      | 20           | -                          | 1   | -      | -                | -                          | -                       |
| Mass.            | 9                    | -                                  | 1            | -                    | 846                     | 671          | 3                          | 17  | 2      | 6                | -                          | -                       |
| R.I.             | 3                    | 1                                  | -            | -                    | 104                     | 170          | -                          | 5   | -      | -                | -                          | -                       |
| Conn.            | 5                    | -                                  | -            | -                    | 517                     | 1,061        | 1                          | 1   | -      | -                | -                          | -                       |
| MID ATLANTIC     | 279                  | 10                                 | 7            | -                    | 12,430                  | 7,888        | 35                         | 33  | 3      | 3                | -                          | 4                       |
| Upstate N.Y.     | 19                   | 6                                  | 3            | -                    | 1,028                   | 695          | 30                         | 25  | -      | 2                | -                          | -                       |
| N.Y. City        | 179                  | -                                  | 3            | -                    | 8,443                   | 3,318        | 1                          | 2   | -      | -                | -                          | 4                       |
| N.J.             | 49                   | 4                                  | -            | -                    | 975                     | 1,151        | 4                          | 6   | 3      | 1                | -                          | -                       |
| Pa.              | 32                   | -                                  | 1            | -                    | 1,984                   | 2,724        | -                          | -   | -      | -                | -                          | -                       |
| E.N. CENTRAL     | 54                   | 17                                 | 11           | -                    | 8,384                   | 8,698        | 17                         | 47  | 1      | 6                | 4                          | 1                       |
| Ohio             | 25                   | 10                                 | 6            | -                    | 2,638                   | 2,511        | 10                         | 26  | -      | 6                | 3                          | -                       |
| Ind.             | 4                    | 2                                  | -            | -                    | 1,493                   | 479          | 3                          | 4   | -      | -                | -                          | -                       |
| Ill.             | 15                   | 1                                  | -            | -                    | 1,196                   | 1,244        | -                          | -   | -      | -                | -                          | -                       |
| Mich.            | 10                   | 4                                  | 5            | -                    | 2,544                   | 2,389        | 4                          | 17  | 1      | 1                | 1                          | 1                       |
| Wis.             | -                    | -                                  | -            | -                    | 513                     | 75           | -                          | -   | -      | -                | -                          | -                       |
| W.N. CENTRAL     | 24                   | 3                                  | -            | 1                    | 2,836                   | 3,381        | 19                         | 26  | 1      | 1                | 2                          | 1                       |
| Minn.            | 14                   | 1                                  | -            | -                    | 479                     | 419          | 3                          | 2   | 1      | -                | -                          | -                       |
| Iowa             | 2                    | -                                  | -            | -                    | 338                     | 340          | 3                          | 2   | -      | -                | 1                          | -                       |
| Mo.              | 4                    | 1                                  | -            | -                    | 1,426                   | 1,526        | 3                          | 14  | -      | 1                | 1                          | -                       |
| N. Dak.          | 1                    | -                                  | -            | -                    | 38                      | 21           | -                          | -   | -      | -                | -                          | -                       |
| S. Dak.          | -                    | -                                  | -            | -                    | 49                      | 71           | 3                          | -   | -      | -                | -                          | -                       |
| Nebr.            | 1                    | 1                                  | -            | -                    | 112                     | 391          | -                          | 4   | -      | -                | -                          | -                       |
| Kans.            | 2                    | -                                  | -            | 1                    | 396                     | 611          | 7                          | 4   | -      | -                | -                          | 1                       |
| S. ATLANTIC      | 151                  | 26                                 | 11           | 2                    | 11,735                  | 12,324       | 36                         | 72  | 4      | 5                | 2                          | -                       |
| Del.             | 6                    | 1                                  | 2            | -                    | 269                     | 296          | -                          | 4   | -      | -                | -                          | -                       |
| Md.              | 14                   | 2                                  | 5            | -                    | 1,364                   | 1,609        | -                          | -   | -      | -                | -                          | -                       |
| D.C.             | 18                   | 1                                  | -            | -                    | 1,203                   | 938          | -                          | 1   | -      | -                | -                          | -                       |
| Va.              | 10                   | 12                                 | 1            | 1                    | 1,279                   | 1,448        | 2                          | 13  | -      | -                | 1                          | -                       |
| W. Va.           | -                    | 1                                  | -            | -                    | 189                     | 204          | -                          | 2   | 1      | -                | -                          | -                       |
| N.C.             | 4                    | 2                                  | 2            | -                    | 2,027                   | 2,491        | -                          | 12  | -      | 3                | -                          | -                       |
| S.C.             | 8                    | -                                  | -            | -                    | 1,515                   | 1,630        | 4                          | 8   | -      | -                | 1                          | -                       |
| Ge.              | 2                    | 1                                  | -            | -                    | -                       | -            | 9                          | 10  | -      | -                | -                          | -                       |
| Fla.             | 89                   | 6                                  | 1            | 1                    | 3,889                   | 3,706        | 21                         | 22  | 3      | 2                | -                          | -                       |
| E.S. CENTRAL     | 17                   | 4                                  | 7            | -                    | 5,070                   | 5,329        | 2                          | 36  | 1      | -                | -                          | -                       |
| Ky.              | 5                    | -                                  | 2            | -                    | 581                     | 580          | 1                          | 1   | -      | -                | -                          | -                       |
| Tenn.            | 9                    | 3                                  | 1            | -                    | 1,995                   | 2,152        | 1                          | 24  | -      | -                | -                          | -                       |
| Ala.             | -                    | 1                                  | 4            | -                    | 1,339                   | 1,634        | -                          | 11  | 1      | -                | -                          | -                       |
| Miss.            | 3                    | -                                  | -            | -                    | 1,155                   | 983          | -                          | -   | -      | -                | -                          | -                       |
| W.S. CENTRAL     | 93                   | 7                                  | -            | -                    | 8,023                   | 9,711        | 45                         | 16  | 2      | 12               | 1                          | -                       |
| Ark.             | 5                    | -                                  | -            | -                    | 814                     | 996          | -                          | -   | -      | -                | -                          | -                       |
| La.              | 14                   | 1                                  | -            | -                    | 1,338                   | 1,955        | 3                          | -   | -      | -                | -                          | -                       |
| Okla.            | 2                    | 1                                  | -            | -                    | 894                     | 954          | 7                          | 2   | 1      | -                | 1                          | -                       |
| Tex.             | 72                   | 5                                  | -            | -                    | 4,977                   | 5,806        | 35                         | 13  | 1      | 12               | -                          | -                       |
| MOUNTAIN         | 12                   | 5                                  | 2            | -                    | 1,793                   | 2,080        | 28                         | 17  | 2      | 10               | -                          | -                       |
| Mont.            | -                    | -                                  | -            | -                    | 51                      | 87           | 2                          | 1   | -      | -                | -                          | -                       |
| Idaho            | 1                    | -                                  | -            | -                    | 30                      | 69           | -                          | 1   | -      | -                | -                          | -                       |
| Wyo.             | 2                    | -                                  | -            | -                    | 34                      | 46           | -                          | -   | -      | -                | -                          | -                       |
| Colo.            | 1                    | 1                                  | -            | -                    | 389                     | 530          | 4                          | 4   | 2      | 5                | -                          | -                       |
| N. Mex.          | 1                    | 1                                  | -            | -                    | 208                     | 280          | 7                          | 1   | -      | -                | -                          | -                       |
| Ariz.            | 2                    | -                                  | 1            | -                    | 572                     | 542          | -                          | -   | -      | -                | -                          | -                       |
| Utah             | 1                    | 2                                  | 1            | -                    | 81                      | 104          | 11                         | 4   | -      | 5                | -                          | -                       |
| Nev.             | 4                    | 1                                  | -            | -                    | 428                     | 342          | 4                          | 6   | -      | -                | -                          | -                       |
| PACIFIC          | 209                  | 21                                 | 13           | -                    | 8,823                   | 8,334        | 299                        | 162 | 20     | 93               | -                          | 21                      |
| Wash.            | 14                   | -                                  | -            | -                    | 457                     | 620          | 23                         | 10  | 6      | 4                | -                          | -                       |
| Oreg.            | 6                    | -                                  | -            | -                    | 354                     | 520          | 82                         | 13  | 3      | -                | -                          | -                       |
| Calif.           | 186                  | 16                                 | 12           | -                    | 7,663                   | 6,833        | 193                        | 136 | 9      | 88               | -                          | 21                      |
| Alaska           | -                    | -                                  | 1            | -                    | 249                     | 244          | -                          | -   | -      | -                | -                          | -                       |
| Hawaii           | 3                    | 5                                  | -            | -                    | 100                     | 117          | 1                          | 3   | 2      | 1                | -                          | -                       |
| Guam             | -                    | U                                  | -            | -                    | -                       | 6            | U                          | -   | U      | U                | U                          | -                       |
| P.R.             | -                    | U                                  | -            | -                    | 157                     | 331          | -                          | 3   | -      | 1                | -                          | -                       |
| V.I.             | -                    | U                                  | -            | -                    | 8                       | 29           | U                          | U   | U      | U                | U                          | -                       |
| Pac. Trust Terr. | -                    | U                                  | -            | -                    | -                       | 72           | U                          | U   | U      | U                | U                          | -                       |
| American Samoa   | -                    | U                                  | -            | -                    | -                       | -            | U                          | U   | U      | U                | U                          | -                       |

N: Not notifiable

U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending  
January 25, 1986 and January 26, 1985 (4th Week)

| Reporting Area   | Malaria   | Measles (Rubella) |           |            |           |           | Meningococcal Infections | Mumps |           | Pertussis |           |           | Rubella |           |           |
|------------------|-----------|-------------------|-----------|------------|-----------|-----------|--------------------------|-------|-----------|-----------|-----------|-----------|---------|-----------|-----------|
|                  |           | Indigenous        |           | Imported * |           | Total     |                          | 1986  | Cum. 1986 | 1986      | Cum. 1986 | Cum. 1985 | 1986    | Cum. 1986 | Cum. 1985 |
|                  | Cum. 1986 | 1986              | Cum. 1986 | 1986       | Cum. 1986 | Cum. 1985 |                          |       |           |           |           |           |         |           |           |
| UNITED STATES    | 42        | 16                | 51        | -          | 3         | 33        | 196                      | 30    | 120       | 19        | 100       | 89        | 10      | 19        | 17        |
| NEW ENGLAND      | -         | -                 | -         | -          | -         | -         | 14                       | 1     | 3         | 1         | 6         | 1         | -       | -         | 2         |
| Maine            | -         | -                 | -         | -          | -         | -         | 4                        | -     | -         | -         | 1         | -         | -       | -         | -         |
| N.H.             | -         | -                 | -         | -          | -         | -         | -                        | -     | 1         | -         | 2         | -         | -       | -         | 1         |
| Vt.              | -         | -                 | -         | -          | -         | -         | 4                        | -     | -         | -         | -         | 1         | -       | -         | -         |
| Mass.            | -         | -                 | -         | -          | -         | -         | 2                        | -     | -         | -         | 2         | -         | -       | -         | 1         |
| R.I.             | -         | -                 | -         | -          | -         | -         | 1                        | 1     | 2         | -         | -         | -         | -       | -         | -         |
| Conn.            | -         | -                 | -         | -          | -         | -         | 3                        | -     | -         | 1         | 1         | -         | -       | -         | -         |
| MID ATLANTIC     | 6         | 8                 | 11        | -          | 2         | -         | 22                       | 2     | 8         | 3         | 23        | 16        | 4       | 5         | 4         |
| Upstate N.Y.     | -         | -                 | -         | -          | 2         | -         | 5                        | 1     | 4         | 2         | 18        | 5         | 4       | 5         | -         |
| N.Y. City        | 3         | 8                 | 11        | -          | -         | -         | 8                        | -     | -         | -         | -         | 4         | -       | -         | 3         |
| N.J.             | 2         | -                 | -         | -          | -         | -         | 2                        | -     | 2         | -         | 7         | -         | -       | -         | 1         |
| Pa.              | 1         | -                 | -         | -          | -         | -         | 7                        | 1     | 2         | 1         | 7         | 7         | -       | -         | -         |
| E.N. CENTRAL     | 1         | -                 | -         | -          | -         | 14        | 23                       | 14    | 52        | 4         | 17        | 30        | -       | 1         | -         |
| Ohio             | 1         | -                 | -         | -          | -         | -         | 13                       | -     | 9         | 4         | 11        | 8         | -       | -         | -         |
| Ind.             | -         | -                 | -         | -          | -         | -         | 4                        | -     | -         | -         | 3         | 8         | -       | -         | -         |
| Ill.             | -         | -                 | -         | -          | -         | 1         | -                        | 6     | 29        | -         | -         | 2         | -       | -         | -         |
| Mich.            | -         | -                 | -         | -          | -         | -         | 6                        | 8     | 14        | -         | 1         | 1         | -       | -         | -         |
| Wis.             | -         | -                 | -         | -          | -         | 13        | -                        | -     | -         | -         | 2         | 11        | -       | 1         | -         |
| W.N. CENTRAL     | -         | 2                 | 24        | -          | -         | -         | 12                       | 1     | 9         | 1         | 10        | 3         | -       | -         | 4         |
| Minn.            | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | 5         | 1         | -       | -         | -         |
| Iowa             | -         | -                 | -         | -          | -         | -         | 3                        | -     | 3         | -         | 2         | -         | -       | -         | -         |
| Mo.              | -         | -                 | -         | -          | -         | -         | 4                        | -     | 1         | -         | -         | -         | -       | -         | -         |
| N. Dak.          | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | -         | -       | -         | -         |
| S. Dak.          | -         | -                 | -         | -          | -         | -         | 3                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Nebr.            | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | 1         | -       | -         | -         |
| Kans.            | -         | 2                 | 24        | -          | -         | -         | 2                        | 1     | 5         | 1         | 3         | 1         | -       | -         | 4         |
| S. ATLANTIC      | 7         | -                 | -         | -          | -         | -         | 29                       | 3     | 18        | 3         | 14        | 6         | -       | -         | 1         |
| Del.             | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Md.              | 1         | -                 | -         | -          | -         | -         | 2                        | -     | 2         | -         | 4         | 1         | -       | -         | -         |
| D.C.             | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Va.              | 5         | -                 | -         | -          | -         | -         | 2                        | 1     | 4         | -         | 2         | -         | -       | -         | -         |
| W. Va.           | -         | -                 | -         | -          | -         | -         | -                        | -     | 7         | -         | -         | -         | -       | -         | -         |
| N.C.             | 1         | -                 | -         | -          | -         | -         | 5                        | -     | 1         | 1         | 5         | 2         | -       | -         | -         |
| S.C.             | -         | -                 | -         | -          | -         | -         | 6                        | 1     | 2         | -         | 1         | -         | -       | -         | 1         |
| Ge.              | -         | -                 | -         | -          | -         | -         | 4                        | -     | 1         | 1         | 1         | -         | -       | -         | -         |
| Fla.             | -         | -                 | -         | -          | -         | -         | 10                       | 1     | 1         | 1         | 1         | 3         | -       | -         | -         |
| E.S. CENTRAL     | 1         | -                 | -         | -          | -         | -         | 18                       | 1     | 3         | 1         | 5         | 2         | -       | 1         | 1         |
| Ky.              | 1         | -                 | -         | -          | -         | -         | 9                        | -     | 2         | -         | 1         | -         | -       | 1         | -         |
| Tenn.            | -         | -                 | -         | -          | -         | -         | 3                        | 1     | 1         | -         | 1         | 1         | -       | -         | -         |
| Ala.             | -         | -                 | -         | -          | -         | -         | 6                        | -     | -         | 1         | 3         | 1         | -       | -         | -         |
| Miss.            | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | -         | -       | -         | -         |
| W.S. CENTRAL     | -         | -                 | -         | -          | -         | -         | 6                        | 1     | 2         | -         | -         | 9         | -       | -         | 1         |
| Ark.             | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | 6         | -       | -         | -         |
| La.              | -         | -                 | -         | -          | -         | -         | 1                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Okla.            | -         | -                 | -         | -          | -         | -         | 2                        | N     | N         | -         | -         | 3         | -       | -         | -         |
| Tex.             | -         | -                 | -         | -          | -         | -         | 3                        | 1     | 2         | -         | -         | -         | -       | -         | -         |
| MOUNTAIN         | -         | -                 | 1         | -          | -         | 10        | 12                       | 2     | 9         | 2         | 11        | 2         | -       | -         | -         |
| Mont.            | -         | -                 | -         | -          | -         | 10        | 2                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Idaho            | -         | -                 | -         | -          | -         | -         | 1                        | -     | -         | -         | 2         | -         | -       | -         | -         |
| Wyo.             | -         | -                 | -         | -          | -         | -         | -                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Colo.            | -         | -                 | -         | -          | -         | -         | -                        | -     | 1         | 1         | 1         | -         | -       | -         | -         |
| N. Mex.          | -         | -                 | 1         | -          | -         | -         | 2                        | N     | N         | 2         | 5         | 1         | -       | -         | -         |
| Ariz.            | -         | -                 | -         | -          | -         | -         | 4                        | -     | 6         | -         | 3         | 1         | -       | -         | -         |
| Utah             | -         | -                 | -         | -          | -         | -         | 1                        | -     | 1         | -         | -         | -         | -       | -         | -         |
| Nev.             | -         | -                 | -         | -          | -         | -         | 2                        | 1     | 1         | -         | -         | -         | -       | -         | -         |
| PACIFIC          | 27        | 6                 | 15        | -          | 1         | 9         | 60                       | 5     | 16        | 4         | 14        | 20        | 6       | 12        | 4         |
| Wash.            | 1         | -                 | -         | -          | -         | 1         | 8                        | -     | -         | -         | 5         | 1         | -       | -         | -         |
| Oreg.            | -         | -                 | -         | -          | -         | -         | 5                        | N     | N         | -         | -         | 4         | -       | -         | -         |
| Calif.           | 25        | 5                 | 14        | -          | 1         | 7         | 46                       | 4     | 15        | 3         | 8         | 15        | 6       | 12        | 4         |
| Alaska           | -         | -                 | -         | -          | -         | -         | 2                        | -     | -         | -         | -         | -         | -       | -         | -         |
| Hawaii           | -         | 1                 | 1         | -          | -         | 1         | -                        | 1     | 1         | 1         | 1         | -         | -       | -         | -         |
| Guam             | -         | U                 | -         | U          | -         | 7         | -                        | U     | -         | U         | -         | -         | U       | -         | -         |
| P.R.             | -         | -                 | -         | -          | -         | 15        | -                        | -     | 2         | 1         | 2         | 1         | -       | -         | -         |
| V.I.             | -         | U                 | -         | U          | -         | 1         | -                        | U     | -         | U         | -         | -         | U       | -         | -         |
| Pac. Trust Terr. | -         | U                 | -         | U          | -         | -         | -                        | U     | -         | U         | -         | -         | U       | -         | -         |
| Amer. Samoa      | -         | U                 | -         | U          | -         | -         | -                        | U     | -         | U         | -         | -         | U       | -         | -         |

\*For measles only, imported cases includes both out-of-state and international importations.

N Not notifiable U Unavailable <sup>†</sup>International <sup>‡</sup>Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 25, 1986 and January 26, 1985 (4th Week)

| Reporting Area   | Syphilis (Civilian)<br>(Primary & Secondary) |              | Toxic-<br>shock<br>Syndrome | Tuberculosis |              | Tul-<br>saremia | Typhoid<br>Fever | Typhus Fever<br>(Tick-borne)<br>(RMSF) | Rabies,<br>Animal |
|------------------|--|--------------|-----------------------------|--------------|--------------|-----------------|------------------|--|-------------------|
|                  | Cum.<br>1986                                 | Cum.<br>1985 |                             | Cum.<br>1986 | Cum.<br>1985 |                 |                  |  |                   |
| UNITED STATES    | 1,568  | 1,708        | 2                           | 1,048        | 1,066        | 6               | 19               | 4                                      | 291               |
| NEW ENGLAND      | 48   | 38           | -                           | 25           | 38           | -               | 1                | 1                                      | -                 |
| Maine            | 3  | 1            | -                           | 6            | 3            | -               | -                | -                                      | -                 |
| N.H.             | 1  | 1            | -                           | -            | 3            | -               | -                | -                                      | -                 |
| Vt.              | 1  | -            | -                           | 1            | -            | -               | -                | -                                      | -                 |
| Mass.            | 25   | 20           | -                           | 7            | 22           | -               | 1                | 1                                      | -                 |
| R.I.             | 1  | -            | -                           | -            | 6            | -               | -                | -                                      | -                 |
| Conn.            | 17   | 16           | -                           | 11           | 5            | -               | -                | -                                      | -                 |
| MID ATLANTIC     | 250  | 229          | -                           | 215          | 258          | -               | 1                | -                                      | 39                |
| Upstate N.Y.     | 14   | 11           | -                           | 31           | 27           | -               | -                | -                                      | 5                 |
| N.Y. City        | 166  | 143          | -                           | 114          | 142          | -               | 1                | -                                      | -                 |
| N.J.             | 49   | 44           | -                           | 43           | 11           | -               | -                | -                                      | -                 |
| Pa.              | 21   | 31           | -                           | 27           | 76           | -               | -                | -                                      | 34                |
| E.N. CENTRAL     | 43   | 89           | -                           | 165          | 123          | -               | 2                | -                                      | 7                 |
| Ohio             | 7  | 10           | -                           | 21           | 27           | -               | -                | -                                      | -                 |
| Ind.             | 18   | 6            | -                           | 14           | 14           | -               | -                | -                                      | 1                 |
| Ill.             | 9  | 55           | -                           | 87           | 80           | -               | -                | -                                      | -                 |
| Mich.            | 6  | 14           | -                           | 33           | 18           | -               | 2                | -                                      | 2                 |
| Wis.             | 3  | 4            | -                           | 10           | 4            | -               | -                | -                                      | 4                 |
| W.N. CENTRAL     | 17   | 16           | 1                           | 12           | 24           | 4               | -                | -                                      | 27                |
| Minn.            | 3  | 2            | -                           | 2            | 2            | -               | -                | -                                      | -                 |
| Iowa             | 3  | 3            | -                           | 2            | 10           | 1               | -                | -                                      | 9                 |
| Mo.              | 9  | 7            | -                           | 6            | 5            | 3               | -                | -                                      | 1                 |
| N. Dak.          | 2  | -            | -                           | 2            | 1            | -               | -                | -                                      | 17                |
| S. Dak.          | -  | -            | -                           | -            | 1            | -               | -                | -                                      | -                 |
| Nebr.            | -  | 1            | 1                           | -            | 2            | -               | -                | -                                      | -                 |
| Kans.            | -  | 3            | -                           | -            | 3            | -               | -                | -                                      | -                 |
| S. ATLANTIC      | 341  | 388          | 1                           | 213          | 194          | 1               | -                | 1                                      | 57                |
| Del.             | 1  | 3            | -                           | -            | 3            | -               | -                | -                                      | -                 |
| Md.              | 41   | 38           | -                           | 11           | 15           | -               | -                | -                                      | 40                |
| D.C.             | 19   | 10           | -                           | 14           | 12           | -               | -                | -                                      | -                 |
| Va.              | 34   | 26           | 1                           | 7            | 5            | -               | -                | -                                      | 6                 |
| W. Va.           | 2  | -            | -                           | 5            | 10           | -               | -                | -                                      | 1                 |
| N.C.             | 37   | 54           | -                           | 38           | 22           | -               | -                | -                                      | 1                 |
| S.C.             | 70   | 63           | -                           | 35           | 31           | -               | -                | 1                                      | -                 |
| Ge.              | -  | -            | -                           | 25           | 26           | 1               | -                | -                                      | 2                 |
| Fla.             | 137  | 194          | -                           | 78           | 75           | -               | -                | -                                      | 8                 |
| E.S. CENTRAL     | 120  | 188          | -                           | 109          | 91           | 1               | -                | 2                                      | 17                |
| Ky.              | 8  | 6            | -                           | 40           | 21           | 1               | -                | 1                                      | 1                 |
| Tenn.            | 59   | 20           | -                           | 19           | 23           | -               | -                | -                                      | 9                 |
| Ark.             | 53   | 80           | -                           | 50           | 44           | -               | -                | 1                                      | 7                 |
| Miss.            | -  | 82           | -                           | -            | 3            | -               | -                | -                                      | -                 |
| W.S. CENTRAL     | 384  | 383          | -                           | 78           | 75           | -               | -                | -                                      | 28                |
| Ark.             | 19   | 32           | -                           | 19           | 1            | -               | -                | -                                      | 4                 |
| La.              | 66   | 82           | -                           | 45           | 28           | -               | -                | -                                      | 4                 |
| Okla.            | 10   | 9            | -                           | 4            | 13           | -               | -                | -                                      | 4                 |
| Tex.             | 289  | 260          | -                           | 8            | 35           | -               | -                | -                                      | 20                |
| MOUNTAIN         | 35   | 73           | -                           | 20           | 15           | -               | 1                | -                                      | 61                |
| Mont.            | -  | -            | -                           | -            | 2            | -               | -                | -                                      | 34                |
| Idaho            | 1  | 1            | -                           | -            | -            | -               | -                | -                                      | -                 |
| Wyo.             | -  | 2            | -                           | -            | -            | -               | -                | -                                      | -                 |
| Colo.            | 18   | 20           | -                           | -            | -            | -               | -                | -                                      | 38                |
| N. Mex.          | -  | 6            | -                           | -            | 6            | -               | -                | -                                      | -                 |
| Ariz.            | 14   | 43           | -                           | 9            | 11           | -               | -                | -                                      | 1                 |
| Utah             | 2  | 1            | -                           | -            | -            | -               | 1                | -                                      | 8                 |
| Nev.             | -  | -            | -                           | 5            | 2            | -               | -                | -                                      | -                 |
| PACIFIC          | 330  | 304          | -                           | 213          | 250          | -               | 14               | -                                      | 35                |
| Wash.            | -  | 9            | -                           | 14           | 5            | -               | 2                | -                                      | -                 |
| Oreg.            | 11   | 13           | -                           | 9            | 4            | -               | -                | -                                      | -                 |
| Calif.           | 313  | 276          | -                           | 182          | 216          | -               | 11               | -                                      | 34                |
| Alaska           | -  | -            | -                           | -            | 18           | -               | -                | -                                      | 1                 |
| Hawaii           | 6  | 6            | -                           | 8            | 7            | -               | 1                | -                                      | -                 |
| Guam             | -  | -            | U                           | -            | 2            | -               | -                | -                                      | -                 |
| P.R.             | 57   | 71           | -                           | 20           | 14           | -               | -                | -                                      | 4                 |
| V.I.             | -  | -            | U                           | -            | -            | -               | -                | -                                      | -                 |
| Pac. Trust Terr. | -  | 9            | U                           | -            | 5            | -               | -                | -                                      | -                 |
| Amer. Samoa      | -  | -            | U                           | -            | -            | -               | -                | -                                      | -                 |

U Unavailable

TABLE IV. Deaths in 121 U.S. cities,\* week ending  
January 25, 1986 (4th Week)

| Reporting Area      | All Causes, By Age (Years) |       |       |       |      |    | P&I** | Total | Reporting Area          | All Causes, By Age (Years) |       |       |       |      |     | P&I** | Total |
|---------------------|----------------------------|-------|-------|-------|------|----|-------|-------|-------------------------|----------------------------|-------|-------|-------|------|-----|-------|-------|
|                     | All Ages                   | ≥85   | 45-84 | 25-44 | 1-24 | <1 |       |       |                         | All Ages                   | ≥85   | 45-84 | 25-44 | 1-24 | <1  |       |       |
| <b>NEW ENGLAND</b>  | 708                        | 504   | 135   | 34    | 12   | 23 | 73    |       | <b>S. ATLANTIC</b>      | 1,358                      | 898   | 292   | 89    | 42   | 37  | 52    |       |
| Boston, Mass.       | 164                        | 95    | 41    | 14    | 8    | 6  | 17    |       | Atlanta, Ga.            | 159                        | 95    | 46    | 14    | 4    | -   | 4     |       |
| Bridgeport, Conn.   | 42                         | 24    | 13    | 2     | 1    | 2  | 2     |       | Baltimore, Md.          | 267                        | 153   | 66    | 25    | 12   | 11  | 7     |       |
| Cambridge, Mass.    | 32                         | 25    | 6     | 1     | -    | -  | 4     |       | Charlotte, N.C.         | 79                         | 48    | 22    | 7     | 1    | 1   | 3     |       |
| Fall River, Mass.   | 43                         | 37    | 5     | 1     | -    | -  | 1     |       | Jacksonville, Fla.      | 111                        | 66    | 32    | 5     | 7    | 1   | 6     |       |
| Hartford, Conn.     | 60                         | 39    | 16    | 1     | -    | 4  | 9     |       | Miami, Fla.             | 129                        | 78    | 34    | 7     | 7    | 3   | 1     |       |
| Lowell, Mass.       | 29                         | 27    | 2     | -     | -    | -  | 1     |       | Norfolk, Va.            | 59                         | 35    | 16    | 4     | 3    | 1   | 6     |       |
| Lynn, Mass.         | 25                         | 20    | 5     | -     | -    | -  | 2     |       | Richmond, Va.           | 70                         | 39    | 21    | 6     | 1    | 3   | 7     |       |
| New Bedford, Mass.  | 21                         | 18    | 2     | -     | 1    | -  | -     |       | Savannah, Ga.           | 58                         | 41    | 11    | 3     | 1    | 2   | 3     |       |
| New Haven, Conn.    | 53                         | 34    | 12    | 2     | -    | 5  | 5     |       | St. Petersburg, Fla.    | 130                        | 109   | 17    | 3     | -    | 1   | 10    |       |
| Providence, R.I.    | 77                         | 68    | 8     | 1     | 1    | 1  | 12    |       | Tampa, Fla.             | 94                         | 57    | 18    | 7     | 4    | 8   | 1     |       |
| Somerville, Mass.   | 10                         | 8     | -     | 2     | -    | -  | 1     |       | Washington, D.C.        | 164                        | 150   | 2     | 4     | 2    | 6   | 3     |       |
| Springfield, Mass.  | 50                         | 40    | 14    | 2     | 1    | 1  | 9     |       | Wilmington, Del.        | 38                         | 27    | 7     | 4     | -    | -   | 1     |       |
| Waterbury, Conn.    | 33                         | 28    | 3     | 1     | -    | 1  | 5     |       |                         |                            |       |       |       |      |     |       |       |
| Worcester, Mass.    | 61                         | 43    | 8     | 7     | -    | 3  | 5     |       |                         |                            |       |       |       |      |     |       |       |
| <b>MID ATLANTIC</b> | 2,997                      | 2,014 | 588   | 251   | 60   | 70 | 188   |       | <b>E.S. CENTRAL</b>     | 813                        | 527   | 200   | 42    | 25   | 19  | 47    |       |
| Albany, N.Y.        | 62                         | 33    | 13    | 2     | 1    | 3  | 1     |       | Birmingham, Ala.        | 133                        | 77    | 33    | 11    | 9    | 3   | 2     |       |
| Allentown, Pa. §    | 22                         | 22    | -     | -     | -    | -  | -     |       | Chattanooga, Tenn.      | 58                         | 38    | 16    | 4     | -    | 2   | 2     |       |
| Buffalo, N.Y.       | 129                        | 88    | 25    | 10    | 3    | 3  | 13    |       | Knoxville, Tenn.        | 103                        | 65    | 24    | 7     | 3    | 4   | 8     |       |
| Camden, N.J.        | 62                         | 42    | 16    | 1     | -    | 3  | 5     |       | Louisville, Ky.         | 114                        | 83    | 24    | 3     | 1    | 3   | 9     |       |
| Elizabeth, N.J.     | 38                         | 25    | 8     | 1     | 2    | -  | 1     |       | Memphis, Tenn.          | 214                        | 144   | 49    | 10    | 6    | 5   | 16    |       |
| Erie, Pa. †         | 33                         | 29    | 3     | 1     | -    | -  | 3     |       | Mobile, Ala.            | 39                         | 29    | 6     | 4     | -    | -   | 3     |       |
| Jersey City, N.J.   | 48                         | 30    | 8     | 8     | 1    | -  | 3     |       | Montgomery, Ala.        | 39                         | 27    | 10    | 1     | -    | 1   | 2     |       |
| Newark, N.J.        | 75                         | 33    | 20    | 15    | 5    | 2  | 5     |       | Nashville, Tenn.        | 113                        | 66    | 38    | 2     | 6    | 1   | 5     |       |
| Paterson, N.J.      | 30                         | 21    | 6     | 2     | -    | 1  | 2     |       |                         |                            |       |       |       |      |     |       |       |
| Philadelphia, Pa.   | 499                        | 326   | 118   | 28    | 17   | 10 | 46    |       | <b>W.S. CENTRAL</b>     | 1,389                      | 943   | 240   | 104   | 53   | 49  | 87    |       |
| Pittsburgh, Pa. ‡   | 56                         | 44    | 9     | 2     | -    | 1  | 5     |       | Austin, Tex.            | 38                         | 25    | 8     | 3     | -    | 2   | 4     |       |
| Reading, Pa.        | 42                         | 36    | 4     | -     | -    | -  | 12    |       | Baton Rouge, La.        | 42                         | 32    | 4     | 3     | 2    | 1   | 2     |       |
| Rochester, N.Y.     | 136                        | 97    | 25    | 6     | 4    | 3  | 14    |       | Corpus Christi, Tex.    | 42                         | 21    | 16    | 1     | 1    | 3   | 4     |       |
| Schenectady, N.Y.   | 27                         | 22    | 5     | -     | -    | -  | 3     |       | Dallas, Tex.            | 215                        | 124   | 50    | 21    | 9    | 11  | 7     |       |
| Scranton, Pa. ‡     | 34                         | 25    | 7     | 2     | -    | -  | 3     |       | El Paso, Tex.           | 88                         | 54    | 23    | 9     | 2    | 4   | 5     |       |
| Syracuse, N.Y.      | 115                        | 83    | 22    | 3     | 3    | 4  | 7     |       | Fort Worth, Tex.        | 94                         | 56    | 18    | 11    | 5    | 4   | 9     |       |
| Trenton, N.J.       | 38                         | 26    | 5     | 3     | 1    | 1  | -     |       | Houston, Tex. §         | 244                        | 226   | 1     | 4     | 8    | 5   | 5     |       |
| Utica, N.Y.         | 15                         | 7     | -     | -     | -    | -  | 1     |       | Little Rock, Ark.       | 89                         | 54    | 19    | 3     | 6    | 7   | 10    |       |
| Yonkers, N.Y.       | 31                         | 23    | 6     | 1     | -    | 1  | 1     |       | New Orleans, La.        | 137                        | 70    | 25    | 25    | 12   | 5   | -     |       |
|                     |                            |       |       |       |      |    |       |       | San Antonio, Tex.       | 246                        | 173   | 46    | 16    | 5    | 6   | 18    |       |
|                     |                            |       |       |       |      |    |       |       | Shreveport, La.         | 70                         | 50    | 15    | 2     | -    | 3   | 6     |       |
|                     |                            |       |       |       |      |    |       |       | Tulsa, Okla.            | 94                         | 58    | 15    | 6     | 3    | 2   | 13    |       |
| <b>E.N. CENTRAL</b> | 2,324                      | 1,656 | 394   | 118   | 63   | 91 | 113   |       | <b>MOUNTAIN</b>         | 757                        | 487   | 164   | 56    | 25   | 25  | 52    |       |
| Akron, Ohio         | 53                         | 34    | 13    | 2     | 1    | 3  | 3     |       | Albuquerque, N.Mex.     | 87                         | 62    | 17    | 4     | 2    | 2   | 5     |       |
| Canton, Ohio        | 24                         | 15    | 7     | 1     | -    | 1  | 1     |       | Colorado Springs, Colo. | 41                         | 20    | 8     | 7     | 2    | 4   | 5     |       |
| Chicago, Ill. §     | 823                        | 462   | 11    | 26    | 16   | 37 | 16    |       | Denver, Colo.           | 147                        | 94    | 34    | 11    | 3    | 5   | 10    |       |
| Cincinnati, Ohio    | 148                        | 100   | 31    | 6     | 4    | 5  | 9     |       | Las Vegas, Nev.         | 132                        | 73    | 38    | 15    | 2    | 4   | 10    |       |
| Cleveland, Ohio     | 128                        | 77    | 33    | 8     | 2    | 8  | 1     |       | Ogden, Utah             | 22                         | 16    | 5     | -     | -    | 1   | 3     |       |
| Columbus, Ohio      | 131                        | 93    | 23    | 4     | 7    | 4  | 4     |       | Phoenix, Ariz.          | 162                        | 109   | 32    | 7     | 10   | 4   | 5     |       |
| Dayton, Ohio        | 115                        | 79    | 27    | 4     | 4    | 1  | 3     |       | Pueblo, Colo.           | 15                         | 11    | 2     | 2     | -    | -   | 2     |       |
| Detroit, Mich.      | 288                        | 176   | 62    | 26    | 13   | 8  | 6     |       | Salt Lake City, Utah    | 49                         | 30    | 11    | 2     | 4    | 2   | -     |       |
| Evansville, Ind.    | 62                         | 47    | 10    | 4     | 1    | -  | 6     |       | Tucson, Ariz.           | 102                        | 72    | 17    | 8     | 2    | 3   | 12    |       |
| Fort Wayne, Ind.    | 73                         | 49    | 18    | 2     | 1    | 3  | 7     |       |                         |                            |       |       |       |      |     |       |       |
| Gary, Ind.          | 16                         | 11    | 4     | 1     | -    | -  | -     |       | <b>PACIFIC</b>          | 2,119                      | 1,505 | 368   | 135   | 61   | 41  | 157   |       |
| Grand Rapids, Mich. | 66                         | 50    | 9     | 3     | 2    | 2  | 7     |       | Berkeley, Calif.        | 10                         | 10    | -     | -     | -    | -   | -     |       |
| Indianapolis, Ind.  | 184                        | 113   | 48    | 12    | 5    | 6  | 10    |       | Fresno, Calif.          | 105                        | 74    | 20    | 5     | 4    | 2   | 12    |       |
| Madison, Wis.       | 32                         | 26    | 3     | -     | -    | -  | 1     |       | Glendale, Calif.        | 25                         | 18    | 7     | -     | -    | -   | 3     |       |
| Milwaukee, Wis.     | 136                        | 102   | 22    | 7     | 1    | 4  | 6     |       | Honolulu, Hawaii        | 50                         | 15    | 5     | 3     | 1    | 8   | 6     |       |
| Peoria, Ill.        | 51                         | 33    | 14    | 1     | 1    | 2  | 8     |       | Long Beach, Calif.      | 136                        | 95    | 29    | 6     | 4    | 2   | 22    |       |
| Rockford, Ill.      | 47                         | 39    | 5     | 2     | 1    | -  | 6     |       | Los Angeles, Calif.     | 624                        | 427   | 113   | 49    | 21   | 5   | 20    |       |
| South Bend, Ind.    | 30                         | 17    | 12    | -     | -    | 1  | 3     |       | Oakland, Calif.         | 75                         | 52    | 9     | 10    | -    | 4   | 7     |       |
| Toledo, Ohio        | 127                        | 95    | 23    | 3     | 1    | 5  | 14    |       | Pasadena, Calif.        | 27                         | 26    | -     | -     | -    | -   | 1     |       |
| Youngstown, Ohio    | 62                         | 38    | 19    | 4     | 1    | -  | 1     |       | Portland, Oreg. §       | 143                        | 137   | -     | 2     | 2    | 2   | 10    |       |
|                     |                            |       |       |       |      |    |       |       | Sacramento, Calif.      | 155                        | 109   | 21    | 14    | 7    | 4   | 13    |       |
| <b>W.N. CENTRAL</b> | 791                        | 536   | 131   | 59    | 33   | 32 | 42    |       | San Diego, Calif.       | 152                        | 104   | 26    | 5     | 9    | 8   | 21    |       |
| Des Moines, Iowa    | 78                         | 53    | 13    | 8     | 2    | 2  | 4     |       | San Francisco, Calif.   | 168                        | 108   | 41    | 14    | 3    | 2   | 7     |       |
| Duluth, Minn.       | 27                         | 20    | 5     | -     | 2    | -  | -     |       | San Jose, Calif.        | 161                        | 103   | 39    | 14    | 2    | 3   | 18    |       |
| Kansas City, Kans.  | 43                         | 28    | 10    | 1     | 3    | 3  | 1     |       | Seattle, Wash.          | 167                        | 115   | 36    | 6     | 5    | 5   | 4     |       |
| Kansas City, Mo.    | 125                        | 79    | 30    | 11    | 4    | 1  | 8     |       | Spokane, Wash.          | 53                         | 47    | 6     | -     | -    | -   | 4     |       |
| Lincoln, Neb.       | 47                         | 32    | 6     | 4     | 3    | 2  | 4     |       | Tacoma, Wash.           | 44                         | 30    | 6     | 5     | 1    | 2   | 1     |       |
| Minneapolis, Minn.  | 100                        | 66    | 14    | 10    | 2    | 8  | 5     |       |                         |                            |       |       |       |      |     |       |       |
| Omaha, Neb.         | 85                         | 62    | 14    | 4     | 2    | 3  | 5     |       | <b>TOTAL</b>            | 13,256                     | 9,070 | 2,512 | 888   | 382  | 392 | 809   |       |
| St. Louis, Mo.      | 152                        | 92    | 24    | 18    | 9    | 9  | 6     |       |                         |                            |       |       |       |      |     |       |       |
| St. Paul, Minn.     | 81                         | 66    | 9     | 2     | 4    | -  | 4     |       |                         |                            |       |       |       |      |     |       |       |
| Wichita, Kans.      | 53                         | 40    | 6     | 1     | 2    | -  | 5     |       |                         |                            |       |       |       |      |     |       |       |

\* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

‡ Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

§ Total includes unknown ages.

¶ Data not available. Figures are estimates based on average of past 4 weeks.



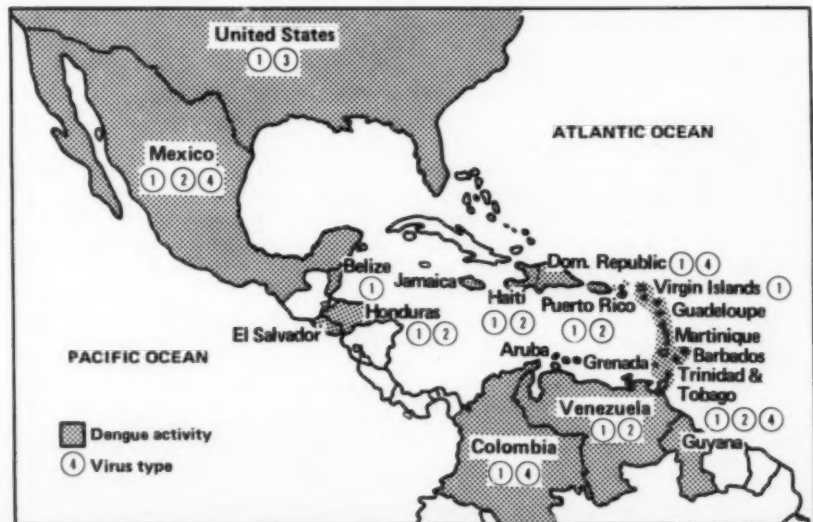
**Dengue — Continued**

Reported by Pan American Health Organization, Washington, DC; Caribbean Epidemiology Center, Port-of-Spain, Trinidad; Pasteur Institute, Cayenne, French Guiana; Instituto de Salubridad y Enfermedades Tropicales, Mexico City, Mexico; Gorgas Memorial Laboratory, Panama City, Panama; Instituto Nacional de Salud, Bogotá, Colombia; Instituto Nacional de Higiene "Rafael Rangel," Caracas, Venezuela; Puerto Rico Dept of Health, San Juan; Dengue Br, Div of Vector-Borne Viral Diseases, Center for Infectious Diseases, CDC.

**Editorial Note:** Dengue has been endemic in the Americas for over 200 years. Recently, the disease appears to be following a pattern similar to that in Southeast Asia 30 years ago, where many countries began to report increased occurrence of sporadic cases of DHF in association with increased incidence of dengue infection. This was followed by major epidemics of the disease in Southeast Asia, and today, DHF is one of the leading causes of hospitalization and death among children in many countries of that region. A similar sequence of events appears to be occurring in the Americas in the 1980s. For example, Cuba, where no dengue had been reported for 30 years, experienced a DEN-1 epidemic in 1977, followed in 1981 by a major DHF epidemic caused by DEN-2, with 158 fatalities. In 1978, Mexico reported its first cases of dengue in many years, and within 6 years, the disease became endemic in most coastal areas of the country. In 1984 the first DHF cases associated with epidemic dengue were reported.

Other countries in the region have also reported increased occurrence of sporadic cases of DHF. This sequence of events, plus the fact that all four serotypes are now endemic in the region, suggest that Caribbean Basin countries are at risk for outbreaks of DHF and underscore the need for more effective surveillance that will facilitate prevention and control of the disease.

FIGURE 1. Dengue — the Americas, 1984



## Current Trends

### Update: Influenza Activity — United States

Beginning in mid-January 1986, school outbreaks of influenza-like illness have been reported from many states. Confirmation of influenza as the etiologic agent for most of these outbreaks is not yet available. School outbreaks of influenza type B in Georgia and Iowa provide examples of the rapid spread of influenza among schoolchildren.

In Georgia, during the week ending January 18, type B virus was isolated from four Atlanta-area students in two influenza-like outbreaks at a college and an elementary school, where absenteeism peaked at 30%. During the week ending January 25, outbreaks of influenza-like illness were reported from schools in all areas of Georgia.

In Iowa, during the week ending January 18, seven type B influenza viruses were isolated from nine students among those with influenza-like illnesses in outbreaks in Marion County. Four type B viruses were isolated from 10 students tested in Webster County, and five type B viruses were isolated from four of 11 students tested and from a teacher in a Madison County school outbreak. During the week ending January 25, school outbreaks of influenza-like illness were reported from all areas of Iowa, with absentee rates in many schools in the 15%-25% range.

Influenza type B virus infections do not appear to be restricted to children and working-aged adults. A nursing-home outbreak has now been confirmed in Connecticut from January 3 to January 20, where 37 (32%) of the 115 residents developed influenza-like illnesses. An earlier nursing-home outbreak has been reported (7).

Tallies of patients with influenza-like illnesses seen by sentinel physicians\* nationwide continued at intermediate levels averaging 8.0 for the reporting week ending January 8, 1986, and 7.7 for the reporting week ending January 15.

For the week ending January 25, five states (Delaware, Minnesota, New Jersey, North Carolina, and Virginia) and the District of Columbia reported widespread outbreaks of influenza-like illness, and 13 states (Connecticut, Idaho, Illinois, Iowa, Kansas, Kentucky, Maryland, Michigan, Oklahoma, Oregon, Pennsylvania, Wisconsin, and Utah) reported regional outbreaks. This represents an increase from the preceding week when only Delaware reported widespread outbreaks, and six states reported regional outbreaks.

Arkansas, Connecticut, Iowa, Michigan, Tennessee, Virginia, and the District of Columbia have recently reported their first influenza isolates—all type B—of the season. Thirty-two states and the District of Columbia have now reported influenza virus isolates this season (Figure 2). Twenty-eight states and the District of Columbia have reported type B isolates; 14 have reported type A(H3N2); and one, Hawaii, has reported type A(H1N1).

The percentage of pneumonia and influenza (P&I) deaths reported from the 121 U.S. cities for the week ending January 25 was 6.1%, compared with 6.2% for the preceding week. These are the first weeks that the P&I percentage has reached 6.0% since March 1985.

*Reported by State and Territorial Epidemiologists; State Laboratory Directors; N Swack, PhD, State Hygienic Laboratory, University of Iowa, Iowa City; J Patterson, JD Smith, E Weir, T Munro, Div of Public Health, Georgia Dept of Human Resources; E Moses, Virus Laboratory, University of Arkansas for Medical Science, Little Rock; N Fithian, B Jones, M Zweig, Dept of Epidemiology and Public Health, Yale University School of Medicine, New Haven, Connecticut; Statistical Svcs Br, Div of Surveillance and Epidemiolog-*

\*Cases reported by those members of the American Academy of Family Physicians Research Panel who serve as sentinel physicians for influenza.

**Influenza — Continued**

*ic Studies, Div of Field Svcs, Epidemiology Program Office, WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.*

**Reference**

1. CDC. Update: influenza activity—United States—and the role of rapid virus typing in improving amantadine use. *MMWR* 1986;35:46-7.

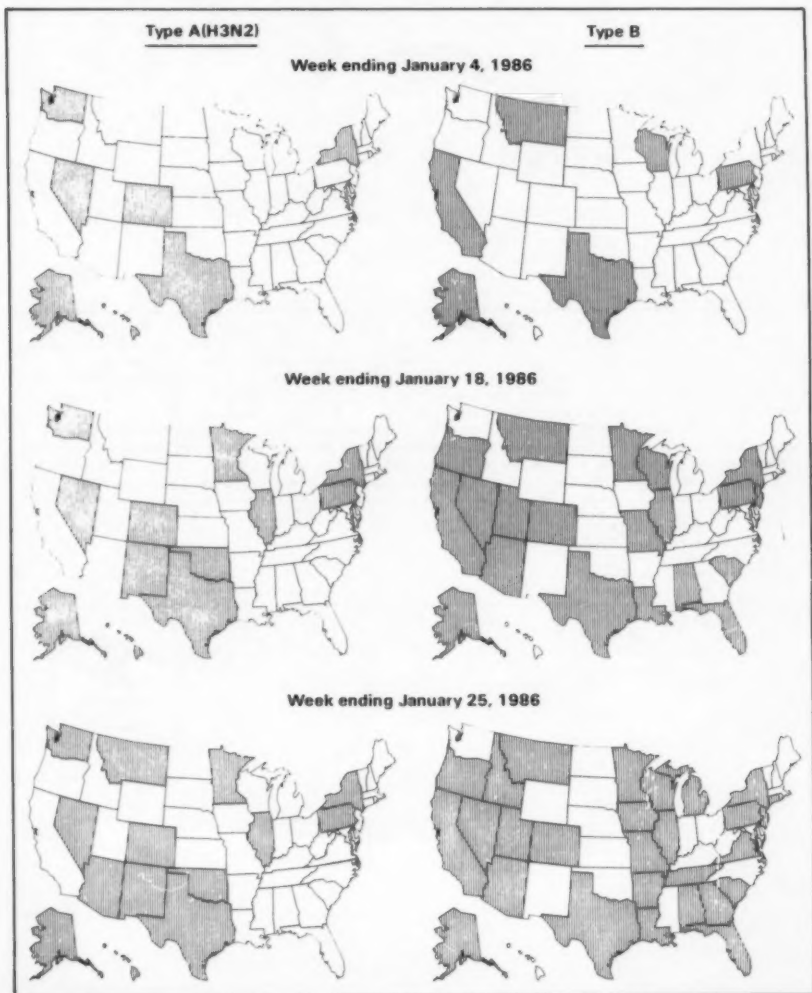
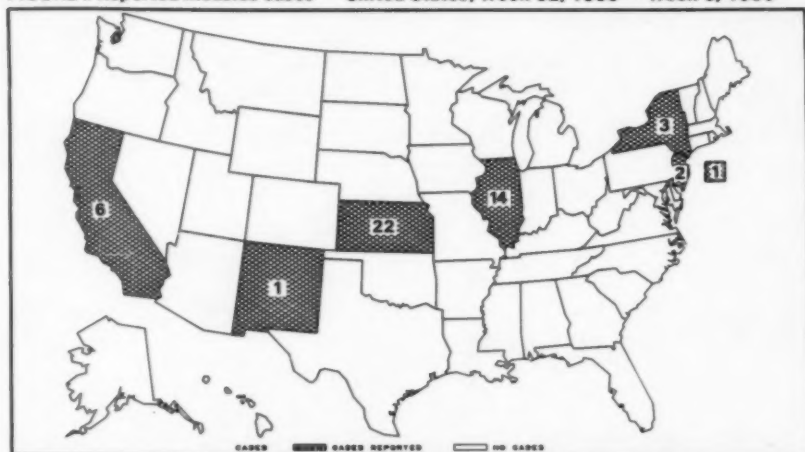
**FIGURE 2. Influenza activity, by state — United States, 1986**

FIGURE 1. Reported measles cases — United States, week 52, 1985 — week 3, 1986



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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